

What is claimed is:

1. An electrical connector comprising:

a unitary insulative housing defining a plurality of parallel slots;

a plurality of parallelly arranged circuit board modules each comprising a dielectric spacer, a circuit board attached to the dielectric spacer and received in a corresponding slot of the housing, and a row of contacts mechanically and electrically connecting with the circuit board and disposed in the corresponding slot; and

a shield member attached to the housing, the circuit board modules being retained by and between the shield member and the housing.

2. The electrical connector as claimed in claim 1, wherein the shield member defines a plurality of slots in a top wall thereof, and the dielectric spacers comprise a plurality of protrusions received in the slots to retain upper portions of the circuit board modules.

3. The electrical connector as claimed in claim 2, wherein the housing is vertically spaced from the top wall of the shield member and retains lower portions of the circuit board modules.

4. The electrical connector as claimed in claim 3, wherein the housing defines a plurality of passageways at opposite sides of each slot and extending through a bottom thereof, and the contacts are soldered to the lower portions of the corresponding circuit boards and extend beyond a bottom of the housing through the passageways.

5. The electrical connector as claimed in claim 1, wherein every two adjacent

circuit board modules are side to side stackable with use of an extended post on one of the two adjacent dielectric spacers and a recessed hole in another of the two adjacent dielectric spacers.

6. The electrical connector as claimed in claim 1, wherein the dielectric spacer of each circuit board module includes a recess and a plurality of laterally extending posts in the recess, and the circuit board is received in the recess of the dielectric spacer and defines a corresponding number of holes receiving the posts.

7. The electrical connector as claimed in claim 1, wherein the shield member is formed with positioning fingers for insertion into corresponding through holes of a printed circuit board.

8. The electrical connector as claimed in claim 7, wherein the shield member comprises a top plate covering a top of the parallel arranged circuit board modules and a rear plate covering a rear of the housing and the circuit board modules, the positioning fingers extending downwardly from the rear plate.

9. The electrical connector as claimed in claim 1, wherein opposite outermost circuit board modules are arranged in such a manner that the dielectric spacers are located at outermost positions.

10. The electrical connector as claimed in claim 1, wherein the housing comprises a front tongue at a lower portion of one end thereof, the front tongue defining a plurality of grooves aligned with corresponding slots, and wherein the circuit boards have mating portions with lower edges received in corresponding grooves.

11. The electrical connector as claimed in claim 1, wherein the housing defines a row of holes adjacent a rear end thereof, and the dielectric spacers of the circuit board modules comprise a plurality of downwardly extending pins received in the holes.

12. The electrical connector as claimed in claim 1, further comprising an alignment pin, and wherein each of the circuit boards defines a through hole, and each of the dielectric spacers defines an opening aligned with the through hole, the alignment pin inserting through the housing, the through holes of the circuit boards and the openings of the dielectric spacers.

13. The electrical connector as claimed in claim 1, wherein the circuit board is located under the post of the corresponding spacer of the same circuit board modules.

14. A circuit board assembly for using in an electrical connector for high speed signal transmission, comprising:

a circuit board comprising a mating portion adapted for engaging with a complementary element, a mounting portion with a fusible element disposed thereon and defining a plated through hole therein; and

a contact including an intermediate portion, a connecting portion extending upwardly from the intermediate portion and surface mounted to the mounting portion, and a tail portion extending downwardly from the intermediate portion adapted for connecting with a printed circuit board, the connecting portion having a projection received in the plated through hole, interstitial space between the plated through hole and the projection being substantially filled with fusible

element after melting and solidifying the fusible element.

15. The circuit board assembly as claimed in claim 14, wherein the connecting portion extends adjacent a first side of the intermediate portion, and the projection extends toward an opposite second side of the intermediate portion.

16. The circuit board assembly as claimed in claim 15, wherein the mounting portion defines a half plated through hole at a bottom thereof and aligned with the plated through hole, and the intermediate portion has an upper end received in the half plated through hole, interstitial space between the half plated through hole and the upper end of the intermediate portion being substantially filled with fusible element after melting and solidifying the fusible element.

17. A circuit board assembly comprising:

a circuit board including a mounting area defining a surface thereon and a through hole therein;

a contact including an intermediate portion, a connection portion extending from the intermediate portion in a first direction parallel to the surface and also engages the surface, a tail portion extending from the intermediate portion in a second direction away from said mounting area, and a projection extending from said connection portion in a third direction perpendicular to said surface and soldered within said through hole.

18. The circuit board assembly as claimed in claim 17, wherein said intermediate portion abuts against an edge of said circuit board in said first direction.

19. The circuit board assembly as claimed in claim 17, wherein said contact extends in a plane which is perpendicular to said surface.

20. The circuit board assembly as claimed in claim 17, wherein said second direction is opposite to said first direction.